

DOCUMENT RESUME

ED 060 949

PS 005 476

AUTHOR Adkins, Dorothy C.; And Others  
TITLE Physical Activities for Preschool.  
INSTITUTION Hawaii Univ., Honolulu.  
SPONS AGENCY Office of Economic Opportunity, Washington, D.C.  
PUB DATE Sep 71  
NOTE 54p.  
  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS Attitudes; Body Image; \*Course Content; \*Curriculum Design; \*Educational Objectives; Educational Programs; Individual Development; Interaction; Motor Development; \*Physical Activities; \*Preschool Children; Psychomotor Skills; Self Concept  
  
IDENTIFIERS \*Hawaii University

ABSTRACT

The underlying premise of the University of Hawaii Physical Activities for Preschool curriculum is that important contributions to a positive self-concept are made by motor independence and a realistic body image. Program objectives include: (1) the development of strength, endurance, and flexibility in skills that involve the muscles, cardiovascular and respiratory systems, and skeletal system, (2) the development of perceptual-motor skills, (3) the development of motor skills, (4) the development of certain spatial-temporal-motor concepts, and (5) the development of a positive attitude toward physical activity, toward social interaction, and toward the self. The program consists of a sequence of increasingly complex motor activities, with alternative activities for most objectives to accommodate the varied needs and interests of individual children. (CK)

F-OED  
PS

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIG-  
INATING IT. POINTS OF VIEW OR OPIN-  
IONS STATED DO NOT NECESSARILY  
REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY.

## PHYSICAL ACTIVITIES FOR PRESCHOOL

First Edition

Dorothy C. Adkins, Professor and Researcher  
Delores M. Curtis, Associate Professor and Consultant  
Doris C. Crowell, Assistant Researcher

The research reported herein was performed pursuant to Grant Number 9929 with the United States Office of Economic Opportunity. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment on the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official position or policy of the Office of Economic Opportunity.

Center for Research in Early Childhood Education  
Dorothy C. Adkins, Director

Education Research and Development Center  
David G. Ryans, Director

University of Hawaii

September 1971

ED 060949

PS 005476

## FOREWORD

The first planning for the development of a physical activities curriculum for preschool children reported here occurred in the late summer of 1970. The expectation was that materials and methods would be tried out with a small number of classes in 1970-71. The effort was viewed as in the nature of a feasibility study, with the expectation that at the end of the year the materials would be revised and that applications in subsequent years would be accompanied by more formal and definitive evaluation than was possible during the initial year. During the course of the year, after about half of the materials had been developed and tried out, it became clear that no further support for this project would be forthcoming from the Office of Economic Opportunity, its initial sponsor. Hence this manual is to be regarded as an experimental edition, incompletely tested and evaluated, although some early efforts in this direction are presented in the general report of the programmatic research program of the Center for 1970-71. It is hoped that others may find the materials interesting and worthy of further tryout.

The major substantive input to the curriculum is attributable to Dr. Delores M. Curtis, Associate Professor in the field of Physical Education in the University Laboratory School, who has served as a part-time consultant on the project. In this effort, she has had the active collaboration of Doris C. Crowell of the Center staff, who has assisted in editing and coordinating the materials as well as in training teachers in their use, supervising their application in classrooms, testing children, observing teachers, and so on.

Grateful acknowledgement is made to Hannah Lou Bennett of the University Laboratory School Head Start program and to Karen Wise Oshiro, director of the Family Services Center Day Care program and her entire staff, all of whom worked actively with us in using the physical activities curriculum in their classes and providing feedback essential to the initial evaluation of the materials.

## INTRODUCTION

### Theoretical Framework for the University of Hawaii Physical Activities for Preschool Curriculum

#### I.

The underlying premise of the University of Hawaii Physical Activities for Preschool Curriculum is that important contributions to a positive self-concept are made by motor independence and a realistic body image. The aim is to foster an attitude toward physical activity throughout the growing years that will result in motor skills and fitness levels appropriate for societal demands and satisfying leisure. It is expected that through successful motor experiences the child will develop favorable attitudes and accurate knowledge about his body and its abilities. Also, opportunities for creative expression in movement should result in growth of the child's self-esteem. Finally, strengthening the young child's self-concept through physical activities may support his explorations and attempts to achieve in academic activities.

The goal of the program is developmental in the sense that activities are oriented toward advancing each child in the attitudinal and skill-related areas of concern. There is no attempt to make the program remedial or compensatory, although individual evaluation and follow-up might lead to the attainment of remedial as well as developmental goals. The target group for this program of physical activities is comprised of four-year-olds who exhibit "normal" variations in development.

The objectives of the program include:

1. The development of strength, endurance, and flexibility in skills that involve the muscles, cardiovascular and respiratory systems, and skeletal system.
2. The development of perceptual-motor skills, e.g., body awareness, spatial relationships, and judgment of speed.
3. The development of motor skills, especially motor skills important in American culture.
4. The development of certain spatial-temporal-motor concepts, e.g., direction, speed, and level; and of the vocabulary required to follow directions and to verbalize the process of solving motor problems.
5. The development of a positive attitude toward physical activity, toward social interaction, and toward the self.

The program consists of a sequence of increasingly complex motor activities, with alternative activities for most objectives to accommodate the varied needs and interests of individual children. In addition, the program is designed to supplement other academic modules, e.g., language and mathematics, as an additional medium for learning.

## II.

Quality and variety in motor performance of the growing four-year-old are the joint products of opportunity, neurophysiological maturation, and heredity. These interacting factors produce differences in each of the following components of motor performance:

1. Physical-anatomical levels of strength, endurance, and flexibility, all of which can be improved by practice.
2. Motor-perceptual input: awareness of (a) body contact with supporting surface, (b) spatial relationships between viewer and object and between external objects, (c) eye-limb spatial relationships, (d) angular or rotary acceleration/deceleration and gravity, and (e) position of limbs in space (Cohen, 1969).
3. Information provided by other sensory modalities concerning weight, texture, substance, size, temperature, pain, taste, and sound.
4. Psychological set from previous experience and the degree of satisfaction and enjoyment during ongoing performance.
5. Comprehension of cognitive factors, e.g., body image (parts, their locations and functions), and conceptual terms (symbols) that can communicate the nature of the motor task.

## III.

Physical movement may be characterized as involving either gross motor or fine motor skills. These categories are based upon the number and size of muscle groups involved in the skill. Within these two categories are three general and perhaps over-lapping subdivisions: stationary positions (postures), locomotion, and object manipulation. These subdivisions describe the purposes of physical activity: to stabilize, to move oneself, or to move external objects. Within these subdivisions can be placed the fundamental motor skills, e.g., running, jumping, throwing, catching, kicking, striking. These fundamental motor patterns are described by their function.

The patterns of physical movement mentioned above are considered to appear phylogenetically, and their development and maintenance are determined by the availability of equipment and the opportunity for practice (Espenschade & Eckert, 1967).

The design of this program is based upon the classifications of physical movement described above and upon the premise that the development of physical ability is in part a function of practice. The general categories of movement activities in the program are Body Control, Locomotor Control, and Manipulatory Control. Within these categories, activities are specified according to their recognizable motor pattern, e.g., jumping, throwing, climbing.

The curriculum is based upon the assumption that guidance and practice can improve the natural development of a motor skill and maximize its usefulness to the child. It is also assumed that increased motor efficiency extends the child's environment, increases his resources for coping with it, and enhances his feelings about himself.

## Content and Teaching Technique

### I.

Physical activity should occupy a meaningful portion of the preschool child's day. The growing child tends to need vigorous and varied physical activity interspersed with periods of rest and quiet. While the child is in school, he will also need to alternate and in some cases combine physical activity with cognitive activity. Due to differences in home and neighborhood environments, some children may need guided vigorous physical activity more than others. The school should be prepared to meet these individual needs in the area of physical development.

The school day should include periods of supervised physical activity and periods of directed instruction that complement each other in filling the child's needs. It is assumed that with appropriate encouragement from the supervising adult, the motor activities introduced during the instructional period will become a part of the child's free play repertoire. Activities in which the child is not very skillful should become a part of the instructional periods.

Supervised play. During supervised physical activity, the teacher should note the kinds of activities in which the children participate. From her knowledge of each child, the teacher may make some suggestions for activities and even participate with him during supervised play. Observations over a period of two or three weeks may lead the teacher to guide the child into activities in which he never participates in order to promote well-rounded development.

Activities that should be encouraged during supervised play, preferably outdoors, should involve the following:

1. Upper limbs for muscular strength, endurance, and flexibility
  - a. weight-bearing
    - (1) inverted--cartwheels, mule kick
    - (2) hanging, swinging, crossing apparatus, tree-climbing
  - b. pushing, pulling, carrying equipment
  - c. throwing, catching, striking
2. Lower limbs for muscular strength, endurance, and flexibility
  - a. running
  - b. climbing
  - c. jumping--jump ropes, for height, for distance
  - d. hopping--hopscotch
  - e. pedalling--tricycles, bicycles, trucks and cars
  - f. leaping

3. Total body for muscular strength, endurance, and flexibility
  - a. bending, stretching, curling, twisting--with and without equipment
  - b. rolling--on grass, on floor, on mats
  - c. dodging and chasing
  - d. balancing
  - e. wrestling
  - f. swimming and water play

Instructional activities. The instructional phase of the program incorporates skill development, perceptual-motor development, conceptual development, and attitudinal development. Activities from at least one of the three principal curriculum categories--Locomotor Control, Body Control, and Manipulatory Control,--should be planned for each day so that within a week all the categories will have been included. Planning becomes more complex as provision is made for individual differences in capabilities and interests.

The following is a general plan of the instructional program:

#### **Locomotor Control Skills**

- A. Locomotion
  1. Walking
  2. Running
  3. Jumping
  4. Hopping
  5. Galloping

#### **Body Control Skills**

- A. Curling, rolling, rotating, stretching, twisting
- B. Suspending, swinging, supporting, landing
- C. Pushing, pulling, lifting
- D. Climbing

#### **Manipulatory Control Skills**

- A. Projection
  1. Rolling
  2. Throwing for distance
  3. Throwing for accuracy



The activities for each of the categories have been printed on different colored paper to facilitate use of the program. The Locomotor Control activities appear on blue paper, the Body Control activities on yellow, and the Manipulatory Control activities on green. Suggested combinations of activities to comprise the programs for single days are separated by rows of asterisks.

Learning through movement. The third form of physical activity occurs when movement is used during any school day as a medium for learning concepts in other subject areas. It is important to note that this is not a substitute for movement instruction. Whenever movement instruction naturally complements other programs, the opportunity to capitalize upon this natural relationship should be seized. For example, advantage should be taken of the opportunity to strengthen concepts from a language program related to opposites (high-low), to prepositions (over-under), and so forth.

## II.

The teacher in this program elicits motor patterns by asking children to perform challenging tasks and by setting up situations through the use of equipment and materials.

The quality of performance changes from orientating movements toward discriminating movements. Discriminations of one's position, tempo, or direction develop during practice as a result of the teacher's verbal descriptions of the physical movements. Further refinement comes with contrast of two extremes; comparison with other actions to determine relativity; and intentional selection of degree, timing, or placement. Quality of performance improves further as the mover is able to accommodate various environmental objects and stresses (e.g., other equipment, other people) and to integrate other motor skills.

The instructional phase consists of several levels of learning. The first is exploration of movement possibilities in an undemanding situation to support the child's natural curiosity, with much encouragement by the teacher. At the next level, the teacher provides a series of open-ended movement challenges: "Can you find a way to move around a hoop?" "How many different ways can you jump?" The challenges can be easily achieved, and no specific manner of accomplishing the task is required. Challenges more open to varied response should be posed to encourage individual interpretation of the task and opportunity for greater success and creativity.

A high level of challenges requires the child to understand verbal instructions and perform within specific physical limitations: "Who can travel around the hoop using both hands and feet?" "Who can jump forward with a partner?" Certain goals that restrict the number of potential responses may be set: "How high can you throw the bean-bag? Can you throw it over the rope? Can you hit this target on the wall?"

As the child meets the challenges, the teacher reinforces his efforts with praise and encourages him to verbalize his actions, reasoning, and planning. The child becomes aware of his capabilities and of how he is developing new skills.

Opportunity for repeated practice to master a skill is essential. At the emergence of a skill, the child may wish to practice it constantly. The teacher should encourage him to practice the skill, to vary the ways he uses it, and to set more difficult goals for himself. Normally, we should expect a child's interest to determine which skill he selects to practice, but sometimes the teacher will need to prompt him to select from two or three suggested activities.

The equipment used in motor activity usually has some cultural connotation implied by its shape, substance, or design. However, the open-mindedness of young children does not restrict them to the designated uses of the equipment. Children enjoy exploring the potentials of materials in conjunction with the developing potentials of their bodies. Providing equipment that is of the appropriate size and weight for such exploration is fundamental to the development of the desired motor patterns.

Where the environment permits, it is suggested that children be encouraged to go barefoot and to wear minimal clothing during physical activity. This will allow them freedom and increase their precision and control.

#### Key to Movement Objectives

##### B. Physical development

- b1 To increase muscular strength:  
arms and shoulder girdle  
trunk--back and abdominal muscles  
legs
- b2 To increase endurance:  
cardiovascular and respiratory systems  
muscular system
- b3 To increase flexibility:  
trunk  
limbs

##### P. Perceptual-motor development

- p1 To increase awareness of body surface serving as (1) base of support and/or (2) point of contact with external object; and to increase awareness of how to bear (1) own weight while on the ground or suspended, or (2) additional weight by self or with help from another person, while stationary or moving.
- p2 To increase awareness of spatial relationships and to develop skill in judging distance, size, elevation, speed of movement, and pathways (1) between self and an external object--stationary or moving, and (2) between two or more external objects--both stationary, both moving, or one stationary and the other moving; and to use this information to plan consequent action, e.g., move forward, move away, or move in relation to.
- p3 To increase the ability to coordinate, i.e., to link to movements of the limbs and/or digits with the visual stimulus, and (1) if the object is stationary, to focus; or (2) if the object is moving, to visually track in order to guide the placing of the hand(s), foot (feet), or any combination thereof in the proper location in the correct sequence:

- to contact reachable objects accurately,
- to contact a sequence of reachable objects,
- to contact objects moving within reach,
- to contact objects at increasing distances by projection of other objects,
- to move in relationship to the object (stimulus)--away, toward, parallel, etc.
- and to become aware of the amount of force, speed, range, angular degrees, etc. necessary to make or avoid contact.
- p4 To increase awareness of body part placement: (1) its position or posture--shape, level, tension-relaxation, (2) its relationship to other parts of the body, (3) its spatial relationship with external objects; and body part motion: speed, range, force, pathway, without constant visual feedback but through kinesthetic proprioceptors and other receptors.
- p5 To increase awareness of and control of response to: (1) motion (inertia)--linear or rotary, accelerating or decelerating, and (2) the effects of gravity and buoyancy on the self and on external objects.
- p6 To increase sensory awareness of and to develop ability to observe: shape, size, temperature, density, texture, pattern, color, rhythm, sound, movement, etc. that occur in the child's surroundings, and to use these sensations as stimuli to movement.

#### C. Concept development

- c1 To develop a realistic body image: to identify, locate, and recognize functions of various anatomical parts--hands, arms, wrist, elbow, shoulder, feet, legs, ankles, knees, hips, chest, stomach, waist, back, neck, head, muscles, joints, bones, lungs, heart.
- c2 To understand and use spatial-temporal-motor terms:
  - actions and basic positions: bend, stretch, twist, turn, swing, sit, stand, crouch, lie, jump, walk tiptoe, toss, catch, etc.
  - spatial relationships: front, back, top, bottom, side, toward, away, across, under, over, through, around, beside
  - spatial concepts: facing, direction, level, size or range, distance, shape
  - temporal relationships: duration--long, short; speed--slow, quick
  - degree of force or intensity
- c3 To use some basic principles of movement: developing force, applying force, absorbing force, bearing weight, equilibrium, buoyancy
- c4 To plan a sequence of actions: (1) involving oneself without or with equipment, (2) with one other person, (3) with several other persons.

#### S. Attitude development

- s1 To improve the child's opinion about himself:
  - his ability to move his body skillfully;
  - his strength, endurance, flexibility, speed;
  - his courage, daring, inventiveness;
  - his wisdom in making motor activity decisions/judgments;
  - his ability to convey ideas and feelings through movement;
  - his ability to create/innovate new activities;
  - his ability to complete a task and assume responsibilities
  - and to set realistic goals according to his capabilities.

- s2 To strengthen the child's opinion about physical activity:
  - the joy of moving;
  - the challenge to his capabilities;
  - the excitement of mastering new skills;
  - the satisfaction of having tried his best.
- s3 To improve his social behavior--sharing, cooperating, following group decisions, aiding, assuming responsibilities--with other individual children, within a small group, as a member of the whole group.

A. Application of movement skills and concepts

- a1 Dance
- a2 Expressive/creative movement
- a3 Games

### Rating of Skill Levels

In attempting to collect information about each motor task presented to the children, the Gutteridge (1939) rating scale was suggested for use by the teachers in the feasibility study. It is not a part of the program but is included as a supplementary method of evaluation.

The Gutteridge approach is scored by the teacher by assigning to the various skills involved in the program (e.g., running, jumping, throwing) a score ranging from 0 to 3, with 0 = no attempt made, 1 = habit in process of formation, 2 = basic habit achieved, and 3 = skillful execution with variations in use. The teacher is encouraged to feel free to add comments about tasks or children. On the pages that follow is presented a more detailed explanation of the method of assigning an observed performance to a scaled category.

### Gutteridge Rating Scale of Motor Skills

#### No Attempt Made (0)

1. Withdraws or retreats when opportunity is given--appears afraid of making actual attempt to perform activity--shows definite unwillingness to make effort--signs of hesitancy in new situations.
2. Makes no approach or attempt but does not withdraw--although showing no outward sign of fear or hesitancy, exhibits no interest even when confronted with opportunity--makes no effort at all to seek out or to venture into new activity.

#### Habit in Process of Formation (1)

3. Attempts activity but seeks help or support--makes movements indicative of willingness to participate in activity, to use tool, or to try toy or equipment, but seeks support and needs encouragement to make any advance.

4. Tries even when not helped or supported, but is inept--makes decided attempts without help or support to try out the tool, toy, or equipment and to master the technique, but is clumsy--movements are uncoordinated.
5. Is progressing but is still using unnecessary movements--makes more useful effort, but still movements are exaggerated and involve the use of unnecessary muscles and parts of body not directly concerned with the basic movements of the skill.
6. Is practicing basic movements--practice is concentrated on learning the basic movements through repetition of the gross performance, though certain crudities are apparent and no obvious effort is directed toward refining.
7. In process of refining movements--basic movements are now more definite and selected but still need further refining--practice is having the effect of furthering precision.

#### Basic Habit Achieved (2)

8. Movements coordinated--elimination of unnecessary movements--actions now show controlled use of selected muscles--precision in action and good direction of effort.
9. Easy performance with display of satisfaction--with such coordination of muscles child is able to achieve results--shows definite satisfaction in bodily skill and power over material.
10. Evidence of accuracy, poise, and grace--gives appearance of effortless skill without apparent conscious attention to component movements--as a result of refinement of movements and adjustments to requirements shows ease, grace, and poise in bodily action.

#### Skillful Execution with Variations in Use (3)

11. Tests skill by adding difficulties or taking chances--having achieved the basic movements and displaying excellent performance, he adds difficulties, obstacles, or hazards that in effect offer a further test of his skill.
12. Combines with other skill or skills--combines basic activity with another skill or motor activity.
13. Speeds, races, or competes with self or others--definitely appears to match his skill with that of others or to be competing with his own record--element of competition is added now that attention is no longer needed to learn basic skill.
14. Uses skill in larger projects, such as dramatic play--particular motor activity used as incidental to or in association with a larger project, including dramatic play. Primary emphasis is not on the execution of the skill for its own sake.



## LOCOMOTOR CONTROL SKILLS

### A. LOCOMOTION

#### 1. WALKING

- p2 1. Can you walk without bumping into anyone?
- p6 2. Who can stop when he hears this signal? (hand clap, piano chord, drum beat, whistle, etc.)
- c2 3. Can you walk faster without bumping into anyone?
- c2 4. Can you walk slower without bumping into anyone?
- c2 p6 5. (Note: Using drum, piano, tambourine, etc. give the children a slow beat and a fast beat, then ask them about the tempo/speed of the beat. Ask them to clap with the drum to develop the tempo.) Can you listen to the drum and walk fast or slow according to what the drum says?
- c2 p6 6. Can you follow the drum as it slows down or speeds up? What is important for you to do? (listen) Be careful not to bump into anyone.
- c2 7. (Note: Later after some other concepts are developed, e.g., direction, level, etc., combine challenges.) Who can walk forward quickly? Who can walk backward slowly?

\* \* \* \* \*

- a3 p6 8. This is going to be the signal to start: one note or one beat or one chord. This is the signal to stop: two beats or two chords. We are going to play a game called "Stop and Start" to see if I can trick you. When I give the signal to start, walk anywhere in our space until you hear the signal to stop. I wonder how many people can do this?
- c3 When you stop so quickly you sometimes lose your balance. Can you stop with your feet apart? Try it. Does that help you keep your balance better? Can you find any other things that help you keep your balance? (crouching lower, holding out arms) Are you ready to play the game again?
- "Stop and Start" may be used with any locomotor skills.

\* \* \* \* \*

- c2 9. Can you find a spot with your eyes somewhere in our space? Keep looking at the spot and walk toward it. Stop when you get there and turn toward your starting spot. Keep looking

at your starting spot and walk to it. Face your first spot and walk toward it again. Face your home spot and walk toward it. You were very quick to learn the meaning of that word "face." It means that you turn your whole body toward that spot.

- c2 10. Face your first spot and walk toward it. Good! Now keep facing your spot and walk home backwards. Be careful of your neighbors.
- c2 11. Can you find a new spot in the room and walk forward toward it? Stop when you get there and then walk backward to your home spot.
- c2 12. Who can walk forward anywhere in the room and then walk backward when I clap my hands? Who can change his direction every time I clap my hands?
- c2 13. Can you find another direction to walk besides forward and backward? (sideward)

(Note: Direction may be combined with any other concept, e.g., tempo, pathway, level, etc. or it may be used with different skills.)

\* \* \* \* \*

- c2 14. Can you walk in a straight line? (Note: Perhaps a straight line will need to be shown on the chalkboard or in another visual form.)
- c2 15. Can you walk in a crooked line? Are your footsteps making a zigzag path?
- c2 16. Can you walk in a curved line? Can you walk in a circle and make a big circle on the ground?
- c2  
r2 17. What other shapes can you make on the floor with your footsteps? (Note: If possible walk in sand where the pathway would be apparent--or--cut out big geometrical shapes from newspaper that can be placed on the floor as guides.)

\* \* \* \* \*

- c2 18. Who can walk with big steps? Who can walk with small steps? Now let's see your regular medium steps again.
- c2 19. Can you walk with big, slow steps? Can you walk with little, fast steps? (Note: Use drum to emphasize tempo and verbally emphasize size.)

- c2 20. Can you walk with slow, little steps? Can you walk with fast, big steps? What is that last one like? (running)
- c2 21. Who can walk backward with slow steps and then walk forward quickly when I give the signal?
- c2 22. Can you walk backward with little steps and then walk forward with big steps?

\* \* \* \* \*

- c2 23. Who can walk taking high steps?
- c2 24. Who can walk keeping his body low and close to the ground?
- c2 25. Can you walk with your body as high as possible? How can you make yourself higher? (raise arms over head) If you want to get even higher, what happens to your feet? (walk tiptoe)
- c2 26. Can you take big tiptoe steps? Can you take small tiptoe steps?
- c2 27. Can you take quick tiptoe steps? Can you take slow tiptoe steps?

\* \* \* \* \*

- a3 28. (Place "magic carpets"--pieces of newspaper or cardboard--on the floor, scattered about the room, one fewer than the number of children. If outdoors, perhaps beanbags will be useful to weigh down the "magic carpets.") We are going to play a game of "Magic Carpets." On the signal start walking anywhere in the space. When you hear the signal to stop, step on the nearest empty magic carpet. Remember, no more than one child on a magic carpet. If you can't find a magic carpet the first stopping time, you have a letter "c". We keep playing and each time we stop, I take away one more magic carpet and more people get a letter. ("a", 2 children are removed; "r", 3 children; "p", 4 children; "e", 5 children, and "t", 6 children. (You may wish to make little cards with the letters to give to the children when they are left without a "magic carpet" to stand on.) When the last letter is spelled, the winners are the children who are left on the "magic carpets." (Collect the cards from the children and ask them to tell the letters.)

\* \* \* \* \*



- p2 29. Can you walk around the obstacles (e.g., plastic bottles,  
p4 bean bags, milk cartons, etc.) without touching them?
- p4 30. Can you walk backward around the obstacles without touching them or your neighbors?
- a3 31. (Note: On drum or whistle sound one note, two notes, three  
p6 notes. Ask the children to differentiate between them.  
r2 Designate half the group to be "ones," the other half to be "twos." Ask the groups to hold up their hands when you sound their signal--one or two. Have the children add one and two to get three. When they hear the signal three, all hold up their hands. When this is clearly understood, have the "ones" stand on one side of the square, which is about 30 feet wide, and the "twos" on an adjacent side of the square.) When we play the game "One, Two, Three" you have to be good listeners. When I give the signal for your group, walk across the square and stop on the opposite side. When I give the signal "three," both groups cross the square at the same time. That is when you will have to be very careful not to bump into anyone. (Note: "One, Two, Three" may be played using other locomotor skills. The teacher may designate which skill before sounding the signal; e.g., "jump"--two notes. Also, the game may be played by varying the direction, level, tempo, etc.)

\* \* \* \* \*

- p2 32. Can you walk beside a partner? (At a later time, try the following with groups of three.)
- c2 33. Can you and your partner stay together when you take big steps? When you take little steps?
- c2 34. Can you and your partner stay together when you walk faster? then slower? Does it help if you listen to the drum?
- c2 35. Can you and your partner walk backward together?  
s2
- c4 36. Can you walk behind your partner and do whatever he does?  
p2 (Note: Perhaps there will be a need to discuss various ways the leader can try to fool the follower--changing direction, tempo, level, range, etc.)

\* \* \* \* \*

- c2 37. Can you join both hands with your partner and walk in a  
s2 little circle?

- a1 38. Can you and your partner walk forward, then backward, then join hands and walk in a little circle? Can we add some music and make this into a little dance? (Note: Select one child to play a rhythm instrument--triangle--for the forward walking part, a second child plays another rhythm instrument--wood blocks--for the backward walking, and a third child plays another instrument--tambourine--for walking in a circle.) (Note: When children can recognize phrasing in music, have them time the direction of the movement to the phrasing of the music.) (Note: Encourage the children to suggest other simple elements which can be used to compose a dance.)

\* \* \* \* \*

- a2 39. Who can walk like an old person who is tired? Who can walk as if he is carrying eggs home from the grocery store? Who can walk as if he is going over to see what made that scary noise outside the door? Who can walk as if he has a sore foot?

- a2 40. Who can think of an idea to show by his walking so that the  
c4 rest of us can try to guess what it is? (Note: Encourage them to conjure up new ideas, but don't reject their repeating the ones done formerly.)

\* \* \* \* \*

- p3 41. Who can walk on this painted line without stepping off?  
p4 a. straight line  
b. curved line  
c. shapes with corners, e.g., rectangle, triangle

- p1 42. Who can walk on this balance board? (Note: Over a period  
p3 of time increase the difficulty by changing to the follow-  
p4 ing:  
a. wide and low--2 inches high  
b. wide and slight elevation--6 inches high  
c. wide and higher elevation--12 inches, 18 inches, etc.  
d. narrower and low)

\* \* \* \* \*

- p4 43. Who can carry this hoop (or beanbag or ball) while he walks the balance board?

- c4 44. Who can walk across the balance board doing something different? (e.g., change level, direction, partners, etc., or whatever the child can think of)

\* \* \* \* \*

- p2 45. Who can walk up the inclined board? Who can walk down the inclined board? Who can think of something to do while walking on the inclined board?

(NOTE: TO INCREASE COMPLEXITY OF THE TASKS, at another time work in a larger group; work outdoors rather than indoors; increase the size of the working unit--two children instead of one.)

\* \* \* \* \*

#### A. LOCOMOTION

##### 2. RUNNING

- p2 1. How fast can you run without bumping into anyone? Remember our signal to stop.
- c2 2. Can you run just as fast but with light, quick steps? What can you do if you are going to bump into someone? (slow, turn)
- c2 3. Who can start walking and then increase his speed until he is running?
- c2 4. What is the difference between running and walking? (speed, size of steps) What are your arms doing when you are running? (swinging back and forth. Note: Encourage relaxed arm movements.)
- c3
- c1 5. (Note: After the children have run enough to be tiring slightly, have them put their hands over their hearts to feel the beating. Bring to their attention their heavy breathing and sweating. Talk with them about the adjustments the body is making to exercise: the heart beats faster to supply the muscles with more energy; the lungs work harder to supply the body with more air; the body perspires to cool off.

When children have run hard, it is wise to have them move about walking rather than collapsing on the ground immediately. When breathing returns to normal, the children may sit or lie, but very likely they will be ready to go again. Generally, we can rely on the wisdom of the body to

determine the stopping point. In a few cases the teacher will need to prompt some children to exert themselves or some children to slow down. If the teacher has available health records of the child, he will know the restrictions the doctor recommends. Otherwise, abnormal efforts or lack of effort by the child should be a signal to the teacher to question the child's behavior. There are reasons other than physical for a child not to be active. Perhaps a conference with the parent will clarify the difficulty.)

\* \* \* \* \*

- b2 6. Can you run for one-half minute without stopping to rest? (Note: To build endurance slowly add to the length of time children are asked to run without stopping. For a week have the children run for 30 seconds daily. Next week add 5 or 10 seconds to his daily running. The amount of increase will depend upon the children's capacities.

The running may be in a path around the playground or in a follow the leader format. If possible, it is desirable to run uphill and downhill or around some obstacles to add to the challenge of running for endurance.

Adding a brief period of endurance running is desirable when the instructional activity is less vigorous, e.g., working on throwing and catching skills.

Record the amount of continuous running the child can accomplish without extraordinary stress.

While children are recovering from running, show them on a stop watch or clock with a second hand the amount of time they ran.)

\* \* \* \* \*

- c3 7. Look for a spot somewhere in our space. Can you run and stop exactly on your spot? Now run back to your starting spot and stop. What do you have to do to stop exactly on the spot? (slow down, keep your eye on the spot)
- c2 8. Who can run zigzag without touching any other person? Who can make very sharp turns when he zigzags?
- c3 9. Who can run to his other spot and make a sharp turn and come right back to his starting spot?
- a3 10. (Set up a starting line and a goal line about 25 feet apart.) Who can run to the other line and make a sharp turn and come back to the starting line?

\* \* \* \* \*



- a3 11. This time I am going to say, "On your mark, get set, GO!" to start you running to the other line. What is the word that tells you to start running? (go) Are you ready to run? On your mark, get set, Go!
- a3 12. Did you bump into anyone when you were running to the line? It is important to run in a straight line if you want to be fast. Who can be the one who runs the straightest in this next race? Are you lined up behind the line? On your mark, get set, GO!
- (Have children run in small groups to determine their relative speed. Then have them race against a partner of similar speed.)

\* \* \* \* \*

- a3 13. Have you ever seen fire engines going to a fire? Aren't they fast? Each of you can be a fire engine. (Give each one in a small group a number. In a larger group give the same number to 2 or 3 children). When I call your number run quickly to put out the fire on that other line. (about 50 feet away). Fire Engines 2 and 4! Fire Engines 1 and 3!

When it is a big fire, it is called "General Alarm" and every fire engine goes to put out the fire. Be listening for that call. (Note: At another time let the first child to reach the fire become the caller.)

\* \* \* \* \*

- a3 14. Have you seen the jets in the sky? Have you been to the airport and seen the jets take off? How many jets take off at one time? (one) Do the jets fly close together in the sky? What would happen to their jet wings if the jets came too close? (crash) We don't have as much room as the sky so we jets will have to be careful not to crash. When the Control Tower calls your name, you may taxi out and take off. The Control Tower will also call your name for landing.

\* \* \* \* \*

- p2 15. Can you run beside a partner and run at the same speed?
- p2 16. Can you run behind your partner? Exchange places.

- p2 17. Can you run with two other people and be a train? Exchange places. Can the leader run all over our space and around everything without losing his train?

\* \* \* \* \*

- p5 18. Who can run in big circles? Who can run in small circles? If you get dizzy, try running the other way.

- a3 19. Now that you can run around a circle so well, we are going to play a game called "Speedy Mongoose" (Speedy Squirrel" on the mainland.) Everyone sit around the big circle. Johnny can be the first leader. He walks around the circle and taps three children on the head lightly (teacher leads him by the hand as she talks). Then the children who are tapped stand up. The leader steps over here out of the way and calls, "Speedy Mongoose." The three children all run to the right around the circle and back to their places. Let's try just the running around the circle before we actually play. Good. The first child who gets back to his own place will be the new leader. Are you ready to really play? Johnny, call out your signal.

\* \* \* \* \*

#### A. LOCOMOTION

##### 3. JUMPING

- c2 1. Who can jump up high? How many feet do you use to jump?  
p1 (2)
- c3 2. What do your legs do before they jump? (Note: Have children try jumping so they have an opportunity to observe that their legs bend; if they have difficulty telling what is happening to themselves, have them observe two or three jumpers in action.) Yes, they bend before the jump. Try jumping again and see if your legs bend to help you get started.
- c3 3. Did you notice that your legs bend when you land? Try landing softly and see if bending your legs helps.
- c3 4. Let's see those high jumps and soft landings again. (Note: Look for a child who swings his arms upward vigorously as he jumps; ask children to observe how he uses his arms.) Can you swing your arms upward to help you jump high?

\* \* \* \* \*

- p4 5. Find a spot to stand on. Who can jump and land on his spot?  
Who can jump and land on his spot three times?
- c2 6. Can you make little, quick jumps and land on your spot?  
Can you make little slow jumps and land on your spot? Are  
you landing quietly?
- c2 7. Who can jump forward? Who can jump forward slowly? quickly?  
Who can jump slowly, then jump faster and faster as I clap  
my hands?
- c2 8. Who can jump forward with big jumps? Who can jump backward  
with small jumps?

\* \* \* \* \*

- c2 9. (Put a long rope on ground stretched straight.) Who can  
p4 jump back and forth across the rope? (backward and for-  
ward jumping)
- c2 10. Who can jump sideward across the rope? Face the end of the  
p4 rope and jump to the other side. Can you start at this end  
of the rope and jump sideward and move toward the other end?  
(Note: They may turn the body slightly so that the jumping  
is actually forward rather than diagonal.)

\* \* \* \* \*

- c2 11. Who can jump and turn around to face the other way? (Put  
p4 a short jump rope or bean bag on the floor for each child.)  
Who can jump and turn going over the rope?
- c4 12. (Give each child a short jump rope stretched on the ground.)  
Who can show 3 different kinds of jumping?
- c4 13. Another day give the child a rope and let him put it on the  
ground in any shape and make up some jumping sequences.

\* \* \* \* \*

- p3 14. (Place 6-10 hula hoops adjacent to each other on the ground--  
first in a straight line, later in a curved or crooked line.  
Instead of hula hoops, newspaper pages might be substituted,  
or a more durable substitute could be the small rug samples.)  
Who can jump from this hoop to the next hoop? (accuracy)

\* \* \* \* \*

- p3 15. (Note: Using chalk on the sidewalk or floor, draw a grid  
c4 of one-foot squares--or perhaps 18 inches depending upon  
the children's capacities--that is 4 feet long and 4 feet  
wide. Later it might be greater in size. Also at some point  
it may be desirable to paint permanent lines somewhat on  
the order of those used in hopscotch, only this game will  
be jumpscotch. A large sheet of heavy-duty vinyl or canvas  
such as a paint drop cloth could be used: paint the grid  
on the vinyl or canvas, which may be rolled up when not in  
use. Encourage the children to develop games using forward,  
backward, sideward, diagonal jumps. Colors, or shapes,  
numerals, or letters painted in each square may be useful  
in promoting this activity.)

\* \* \* \* \*

- a3 16. If one square (see above) can be differentiated by color  
or design, the children could play a variation of "musical  
chairs"--as the music is played, they jump from square to  
square; when the music stops, the child in the "musical  
square" is eliminated for one turn and then returns to the  
game when the next child is out.

\* \* \* \* \*

#### JUMP FROM HEIGHT

- p2 17. Who can jump from this box or bench (about 12 inches high)  
c3 and land softly? Did your knees bend when you landed?  
Remember to wait until the person in front of you is out of  
the way before you jump from the box.
- c3 18. Who can jump from this high box? (18-24 inches or higher  
if the children are capable) Are you landing softly?
- c4 19. Who can do a trick as he jumps from the box? (perhaps clap  
his hands, reach high with his arms, turn around)

\* \* \* \* \*

- p4 20. (Hold a yardstick or similar object 3 feet in front of a  
box and higher than a child's head when he is on the box.)  
Who can jump and touch this stick? Remember your soft land-  
ing. (Note: Be sure the box is stable to support the child's  
take-off, which will be a "push-off" forward from the box.)



- p4 21. (Lines or flat markers--strips of cloth or rubber--on the  
c3 ground 12, 16, 20, 24, etc. inches from the box.) How far  
can you jump from the box? Which way are your arms swing-  
ing? That's right; they swing forward to help you jump  
forward.

\* \* \* \* \*

- c3 22. (When the children are learning to cross the horizontal lad-  
der, they will need to use the same landing principles they  
have been practicing when jumping from a height. The hands  
may assist in the landing; as the child bends his knees and  
hips, his hands may touch the ground.)

\* \* \* \* \*

#### JUMP FOR DISTANCE

- c3 23. (Put 2 parallel lines on the ground about 12 inches apart.)  
Who can jump across the river?  
(Increase the width of the "river" by 2 inches and continue  
increasing the width as long as the children can jump with-  
out getting their feet wet.)  
Are your arms helping you jump farther? (swinging forward)
- c3 24. When the river gets so wide, what could we add to our jump-  
ing to help us get over the wide river? (take running start)  
Start back 5 or 6 feet and run and jump over the river.  
Who can now jump the river and not get his feet wet?
- p1 25. Now are you jumping from one foot or two feet? Yes, you  
take off from one foot if you start running before you jump.  
Are you landing on 2 feet?
- s2 26. (At a later time, divide the children into partners with a  
pair of markers for them to move at their own discretion.  
They can work on standing broad jumping or running broad  
jumping.)

\* \* \* \* \*

#### LEAPING

- p1 27. Can you run, get over the river, and keep running on the  
p4 other side? That's different from regular jumping, isn't  
it? If you take off from one foot and land on the other  
foot, that is called leaping.

- c4 28. (Set up several "rivers" scattered throughout the space.)  
Who can leap across all the different rivers and not get  
his feet wet?

\* \* \* \* \*

- p3 29. (Stretch a long rope a few inches off the ground.) Can you  
p4 leap over the rope? Can you leap if we raise the rope higher?  
Who can land softly and keep running lightly?

\* \* \* \* \*

- p2 30. (Set up bean bags, plastic bottles, milk cartons, or objects  
p3 of similar heights scattered throughout the space.) Who  
p4 can leap over each of these bottles?

\* \* \* \* \*

#### RUNNING JUMP FOR HEIGHT

- p3 31. (Set up high-jump standards with rope weighted at the ends  
p4 and hanging across adjustable supports. Begin the jumping  
height at 8 inches. Raise an inch or 2 each round. It would  
be desirable to have 2 sets of jumping standards so that  
those children who fail to jump higher heights may work at  
lower heights and those who can jump higher proceed to ad-  
vance. Encourage running approach to the jump. Occasionally  
record height each child can jump.)

\* \* \* \* \*

- p3 32. (Hang several different colored strips of cloth about 12  
p4 inches apart, each strip at a different height from the  
ground. Start with the lowest strip about 6 inches higher  
than the tip of the upraised arm of the shortest child.  
The cloth strips should be hanging in an open space in which  
a child could run and jump safely. Tying or pinning the  
strips to a rope stretched between two trees should provide  
a portable jumping challenge. Remind the children to approach  
from only one direction to avoid collisions.)

\* \* \* \* \*

### STANDING JUMP FOR HEIGHT

- p3 33. (Use suspended colored cloth strips as described above or  
p4 make a chart 24" x 36" with colored parallel lines 2 inches  
apart. Fasten the chart to the wall so that the shortest  
child can reach it with his up-stretched hand.) How high  
can you jump without running? How high can you jump and  
touch the chart?  
(To measure actual height of a vertical jump have the child  
stand flat-footed and reach up as high as he can on the chart.  
Note this height and subtract it from the height he can touch  
when he jumps.)

\* \* \* \* \*

### REBOUNTING JUMP

- c2 34. (There are several possibilities for providing the children  
c3 with this type of movement sensation. Walking and playing on  
p1 inflated inner tubes is probably the easiest to provide.  
p5 A large truck-size inner tube under a tumbling mat gives  
some of the bouncing sensation. There are commercially  
available rubber inner tubes covered with a canvas cloth  
which might be duplicated. An old innerspring mattress with-  
out any unsafe projection might be available. A nearby  
intermediate or secondary school is likely to have a minia-  
ture trampoline (mini-tramp or trapelet) which might be  
borrowed for a brief period. The same school might have a  
full-size trampoline and arrangements could be made for the  
young children to go to the school for experiences on the  
trampoline. The older children can serve as spotters and  
assistants on the trampoline.  
a. On the inner tubes and mini-tramp, the teacher can  
hold the child's hands as he jumps and gets the new feeling  
of a surface that rebounds as he moves. As the child gains  
security, the teacher can remove actual support but remain  
nearby.  
b. When jumping from the inner tube or mini-tramp, the  
landing on the hard floor is quite different. Remind the  
children to land with bent knees to absorb the shock of the  
hard surface.  
c. To stop the movement on a rebounding surface, the land-  
ing should be with bent knees, arms out for balance.  
d. On the trampoline, there are several sensations to  
consider: the strangeness, the size of the trampoline bed,  
the height of the trampoline, and the reaction of the elas-  
tic surface. Discussing some of the characteristics of the  
trampoline before getting on it may reduce some fears. Do  
not force a child to get on. Usually after seeing the brav-  
est ones enjoy themselves, most other children will try it--  
perhaps not the first time, but maybe the next time.

e. At first have the child sit or crawl if he is not ready to walk around the bed. A teenager or adult can join him on his first stroll around the bed.

f. Point out the center of the bed (it is marked) and tell him to stay there and see if he can jump up and down. Be certain that he stays near the center. Can he turn around as he jumps?)

(Note: Before doing these activities on the trampoline, have the children review them on the ground.)

\* \* \* \* \*

p3 35. (Note: Review basic jumping 5, 6, 9, 10. Attach one end of a long jump rope to a chair or sturdy object; swing the other end back and forth. Place child at the center of the rope facing the teacher. Give him verbal signals to jump as the rope is slowly swinging back and forth. Tell him to watch the teacher's hand as it makes the rope move. Children tend to move away from the center of the rope, so it is helpful to tape an X on the floor under the center of the rope.)

p3 36. (While the teacher turns the rope in complete circles, she leads the children in saying "jump" at the appropriate time. Be sure that they are watching the teacher's hands. Have them clap and say "jump" as they watch the turning hands. Standing outside the rope, they jump in place at the appropriate time. When the rhythm of the turning and jumping have been established, it is time to try the actual rope jumping.) How many times can you jump?

\* \* \* \* \*

p3 37. (Note: Some children may be ready to try running into a turning rope. It is easier to run in "front door" in which the rope is turning down toward the jumper. The jumper just follows the rope into the jumping spot. First develop the timing of the entry. Little children have slower reaction time, so the signal has to be adjusted accordingly. Usually as the rope is at its peak, the approach should begin. Use a verbal signal in addition to the visual: (first turn) "ready," (second turn) "set," (third turn) "go!" and the child enters the turning rope on "go." To develop this timing, have the child practice running through the rope, not stopping to jump, several times until he has mastered the timing of entry.) Can you run through the turning rope?



Can you run in front door and jump? Can you run in,  
jump, and run out?

\* \* \* \* \*

- p4 38. (Short rope or individual rope jumping is more complex: not only does the child have to jump the rope, he also has to turn it. That is quite a challenge of coordinating arm and leg movements. Short ropes should be available and examples of jumping rope should be seen--the teacher or older children. Some children have been observed to have more success jumping backward than forward. Perhaps a child would be more successful if he jumped a hula hoop he was turning--at least the jumping space might be more reliable than if he used a rope which succumbs to gravity when the child does not have enough speed and force in turning. Heavy-weight rope is more desirable than light-weight rope for the same reason.)

\* \* \* \* \*

#### A. LOCOMOTION

##### 4. HOPPING

- c1 1. Can you stand on one foot? Can you stand on the other  
p1 foot? (notice the use of the arms for balance)
- c1 2. Can you stand on one foot with your eyes closed? Let's  
p1 see if you can do it while I count to 5. Can you count  
p5 to 5 with me? 1-2-3-4-5. Good. Can you stand on the  
other foot with your eyes closed while I count to 5?  
1-2-3-4-5. I wonder if anyone can stand on one foot  
while I count to 10? Ready? 1-2-3-4-5-6-7-8-9-10!
- p1 3. Can you hop up and down on one foot? Can you hop on the  
other foot? (Note: One objective is to develop the  
ability to hop on either foot with equal ability. This  
will contribute to the learning of the skip. Hopping is  
tiring. Children will need to build up leg strength and  
endurance before they can hop for long periods of time.)
- c2 4. Can you hop forward? Are you landing softly on your  
c3 foot? Try hopping forward with the other foot.  
p4

\* \* \* \* \*

p2 5. Can you hop on one spot? Are your hops quiet and soft?  
p5 Try hopping on your spot with your other foot.

c3 6. Can you hop over these lines? (Draw 6 parallel chalk lines  
p2 about 6 inches apart. Later, to increase the difficulty,  
p3 add more lines and/or increase the distance between lines  
p4 to 8, then 10 inches. Encourage children to try both right  
and left feet.)

\* \* \* \* \*

p3 7. Can you hop in these squares? (Draw a straight row of  
p4 8-inch squares. Later increase the size of the squares  
p5 to fit the children's hopping capabilities.  
To further increase difficulty stagger the squares in a  
zigzag pattern or form a circle of squares.  
If squares can be colored, e.g., alternating red and blue,  
ask the children if they can hop only in the red ones.)  
Have children try both feet.

\* \* \* \* \*

c2 8. Can you hop sideward? (Note: At another time use pat-  
p4 terns of squares described above in number 7--straight,  
curved, zigzag to increase difficulty.)

c2 9. Can you hop backward? Can you do it with your other foot?  
p4

p2 10. (Draw a straight line or lay a rope on the ground or floor.)  
p3 Can you hop back and forth across the rope? Can you start  
at this end and hop back and forth until you reach the  
other end? Try it with the other foot.

\* \* \* \* \*

p2 11. Can you hop in and out of the hoop lying on the ground?  
p3 Try with your other foot.

p2 12. Can you hop over this rope? (Hold the rope 2-3 inches  
p3 above the ground. Increase difficulty by holding rope  
c3 an inch or two higher depending upon your observation  
of how high the child is hopping. Look for and encourage  
the swing of the arms and of the non-hopping leg to assist  
in increasing the height of the hop.) Try each foot.

\* \* \* \* \*

p4 13. Can you hop and turn around? Can you hop and turn around  
p5 the other way? Try your other foot. Can you hop and  
turn around and stay in one spot? That's really hard!

c2 14. Can you hop slowly? Can you hop quickly? Try your other  
p6 foot--first slowly, then quickly. Can you hop slowly or  
quickly as I clap my hands (or beat the drum)? Don't let  
me trick you.

c2 15. Can you start hopping slowly and then hop faster and fast-  
p4 er? That's right, I can see you speed up your hopping.  
This time start hopping fast and then hop slower and slow-  
er until you stop. Can you do the same change of speed  
with your other foot?

\* \* \* \* \*

c2 16. Can you take big hops? Can you take little hops? That  
p5 is good; I can see the difference in the size of the hops.  
Try your other foot.

c2 17. Can you take big, slow hops? Try your other foot. Can  
p5 you take little, fast hops? Try the other foot. Which foot  
c4 likes to go fast and which likes to go slow? Start with  
your slow, big hops on one foot, then change to your fast,  
little hops on the other foot.

c2 18. Can you take a little hop and then make the next one  
p4 bigger and the next one bigger? This time can you do the  
opposite--start with a big hop and then keep making them  
smaller and smaller? Try your other foot first going  
from small to bigger, then have your hops get smaller  
and smaller.

\* \* \* \* \*

c2 19. Can you hop 2 times on one foot and then 2 times on the  
c4 other foot? Can you do it without stopping in between?  
Start slowly; hop, hop, change, hop, hop, rest. Now a  
little faster: hop, hop, change, hop, hop, rest. (Note:  
When this can be done smoothly, repeat the pattern 2 times  
before resting. Do not rush the increasing of the number  
of times the pattern is repeated. Encourage forward move-  
ment. The ability to alternate use of the feet while  
moving forward should turn into skipping.

If the child can skip, accompany his movements with a pattern of uneven clapping or beating the drum with which he can identify the skip movement in contrast to the even rhythm of hopping.)

\* \* \* \* \*

#### A. LOCOMOTION

##### 5. GALLOPING

- p2 1. Are you ready to gallop on your pony? Giddyup, ponies!  
 p3 Whoa! With so many ponies galloping in the corral, what  
 a2 happens? Yes, we have bumps. Can you gallop more care-  
fully?
- p1 2. Before your pony feet get too tired, try galloping with  
 p4 the other foot leading. Giddyup!
- c2 3. Can you gallop more slowly and softly? Try slow and quiet  
 p4 galloping with your other foot in front.

\* \* \* \* \*

- p2 4. Can you be a team of ponies and gallop beside a partner?  
 p3 Perhaps you and your partner will need to go slowly at  
 s3 first until you get used to being a team.
- a2 5. Can you be a cowboy (paniola) on his pony rounding up the  
 p2 cattle? Let me see if I can tell when you are just keeping  
 the herd together and when you are chasing after a wandering  
 maverick? What is a maverick? A calf who doesn't stay with  
 the herd.
- a2 6. Can you gallop like a circus pony in the ring? Do fancy  
 p4 circus ponies take big steps or little steps? Do they raise  
 c1 their knees high? What do their heads do as they prance  
 around the ring?
- a2 7. Can you gallop like the riders in a big parade? Do the  
 horses really go fast in the parade? The girls can be the  
 pe'u riders and the boys can be their escorts.
- a2 8. Phonograph record "This is the Way the Lady Rides" ("Happy  
 Times," Educational Dance Recordings SG-1.)

\* \* \* \* \*



## BODY CONTROL ACTIVITIES

### A. CURLING, ROLLING, ROTATING, STRETCHING, TWISTING

- c2 1. Can you stretch tall? Can you curl up small? (Repeat two  
b3 or three times.)
- p4 2. Can you stay curled except for stretching one part of your  
c1 body? (Note: If there is poor response to the task, sug-  
b3 gest stretching a specific part. It is desirable to let chil-  
dren think for themselves as much as possible, so do not  
rush to give them a hint.)
- p4 3. How many different parts of your body can you stretch one  
c1 at a time? (Note: Again it may be necessary to give children  
b3 suggestions at first--one arm, one leg, etc.)
- p4 4. How many different parts of your body can you curl one at  
c1 a time? How will your body have to be before you can start  
b3 to curl?

\* \* \* \* \*

- c1,2 5. Can you stretch all parts of your body? How about your  
p4 fingers and toes? Your face?  
b3
- c1,2 6. Can you curl all parts of your body? What happens to your  
p4 arms, legs, back when you curl up? (body parts bend)  
b3
- c2 7. Do you feel you could fit inside a big ball? Could you  
p4,5 roll like a ball? What happens if your body parts don't  
stay together? Could you still roll like a ball?
- c2 8. In which direction can you roll? Can you roll sideward? Can  
p5,1 you roll forward? Put your hands on the floor but keep your  
head and back curled as you roll forward.

\* \* \* \* \*

- c1,2 9. Can you curl up so your feet are on top and your back is  
p4,1 on the bottom?
- c2 10. Can you quickly stretch all your parts?  
b3
- c2 11. Can you stretch all your parts and keep very low? Are you  
p1 facing the floor (ground) or facing the ceiling (sky)?

c2 12. Can you change from low to high and stretch all your parts?

c1,2 13. Can you bend your arms and legs but not curl up? How many  
p4 different parts can you bend without curling into a ball?  
b3 Do you think you are a crooked or a straight shape with  
all your parts bent?

\* \* \* \* \*

c2 14. (Each child is sitting on the floor with a beanbag in both  
p4 his hands.) How quickly can you put the beanbag where I  
b3 tell you? Ready to begin?  
in front of you  
beside you  
above you  
behind you  
underneath you  
(Note: Repeat, varying the order and the tempo with which  
the directions are given. Have the children stand and place  
the beanbag at different locations. This can be used as a  
form of "Simon Says" game.)

\* \* \* \* \*

c1 15. (Each child has a beanbag.) How quickly can you put the  
beanbag where I tell you?  
on your knee  
on your head  
on your shoulder  
on your foot  
on your elbow  
on your stomach  
on your wrist  
on your back  
under your chin  
etc.

(Note: For increasing difficulty, make the directions more  
specific: on your right foot, on your left shoulder, etc.)

\* \* \* \* \*

b3 16. Play the singing game, "Head, Shoulders, Knees and Toes"  
c1 from Educational Dance Recordings Album SG-1, "Happy Times."  
a1

\* \* \* \* \*

c2 17. How quickly can you change your position? sit--stand--squat--  
p1,4 lie on your stomach--stand on one foot--on your hands and  
b3 knees--on your back--etc.

c2 18. Who can show me a position that is low? Who can show me a  
p4 position that is high?

p1,4 19. Who can show me a good position for resting?

c1 20. Play the singing game, "Let Your Feet Go Tap, Tap, Tap"  
from Educational Dance Recordings Album SG-1, "Happy Times."

\* \* \* \* \*

c2 21. What does a bridge look like? (Note: Perhaps a picture  
p2,1 of a bridge will be necessary to show the concept.) Who  
b3 can make a bridge with his body? What parts are touching  
the floor? What parts are off the floor? How are bridges  
used? (for going over things like rivers or going under  
things like other roads)

\* \* \* \* \*

c1 22. How many things can you find to go under on the playground  
p1,2 (or in the room)? (Note: It may be necessary to devise  
a few "bridges" beforehand.) Can you go under the bridges  
without touching them? Can you go under the bridges feet  
first or some other unusual way?

p1,2 23. Do we have any bridges that you can cross? (for example,  
benches, balance boards, extension ladder lying horizontal,  
etc.)

\* \* \* \* \*

c2 24. Can you make a bridge with your body so someone else can  
p4,2 go under it? "Mary," can you go under "John's" bridge  
s3 without touching? Now it's "Mary's" turn to make a bridge  
b3 for "John" to go under without touching.

p4,2 25. Can we put several people together and make a long tunnel?  
s3 I wonder if "Eddie" can go all the way through the tunnel  
without touching the walls? (Note: Have the first child  
to go through the tunnel take his position at the end of  
the group and the next child then takes his turn crawling  
under the children, and so on.)

\* \* \* \* \*

- p4,2 26. Get some large cardboard boxes and open both ends so they may be used as bridges or a tunnel. A sheet draped over a rope in tent-fashion may be used as a tunnel. Vary the size of the bridges and tunnels to increase the difficulty of moving without contact.
- p4,1 27. Movable playground equipment such as the trestles and planks or boxes and planks can be used to build bridges for crossing.

\* \* \* \* \*

- p4,2 28. (Stretch a long rope a few inches off the ground. One end  
c2 may be tied to a post and the teacher holds the other end, ready to let go if a child gets caught in the rope.) Can you get over the rope? Can you get over the rope backwards?

- p4,2 29. (Raise the long rope to 12-18 inches from the ground.)  
c1,2 Who can go under the rope without touching it? Who can go  
b3 under the rope head first? Be careful not to touch the rope. Who can go under the rope feet first? Can you think of a different way to go under the rope?

- p4,1, 30. (Hold the rope 10-12 inches above the ground.) Who can go  
2 over the rope hands first? Instead of putting your feet  
c1,2 over first, you put your hands on the other side of the rope first. (This may produce a forward roll or cartwheel-type movement. Encourage the forward roll by suggesting the child keep curled and put his hands over the rope first. Encourage the cartwheel by suggesting that the child keep stretched and go over the rope sideward, hands first. The surface under the rope should be safe for the child to fall on--a mat, a rug, or grass.)

\* \* \* \* \*

- p4,2 31. (Hold two long ropes parallel and 8-10 inches apart about  
4-6 inches above the ground.) Who can cross both ropes at once? (repeat several times)

- p4,2 32. (Raise two ropes to 12-18 inches from ground.) Who can  
b3 go under both ropes without touching them? (repeat several times)

- p4,2 33. (Lower the rope which is nearer the children to 4-6 inches  
b3 from the ground.) Who can go over the first rope and under the second rope without touching?

- p4,2 34. (Have children approach the higher rope first. Increase  
b3 the distance between ropes to 18-24 inches.) Who can go under the first rope and over the second rope without touching?

- c4 35. (Have children approach the lower rope first, with the  
p2,4 ropes 30-36 inches apart. Can you jump over the first rope,  
curl, and roll under the second rope without touching. ?

\* \* \* \* \*

- p4,2 36. (Hold one rope about 18 inches above the ground.) Can you  
c2 go under the rope in a curled shape? Did you keep all your  
parts tucked in so you didn't touch the rope?

- c2 37. Can you go under the rope in a stretched shape? Can you  
p2,3 go under the rope in a stretched shape sideward? Can you  
go under the rope in a stretched shape feet first?

\* \* \* \* \*

- c2 38. Can you turn around quickly? Keep turning--stop before  
p1,4 you get dizzy. What were you doing? (twirling, spinning,  
rotating)

- c2 39. Who can turn the top half of his body but keep his feet  
p1,4 stuck on one spot? What were you doing? (twisting) Can  
b3 you twist in any other way? Remember, one end twists but  
the other end stays put.

- p4 40. How far can you twist your body--then quickly untwist?  
b3 Can you twist the other way and quickly untwist? What  
happens to your arms when you do that? Try it and find  
out.

- c1 41. Who can twist just one part of his body at a time? I wonder  
p4 if you can try to twist a different part each time? Do  
b3 all parts of your body twist? (no) Which is easier for  
your body to do--twist or bend? (bend)

- p1,4 42. Who can try twisting in another position? (lying down,  
b3 sitting)

\* \* \* \* \*

## B. SUSPENDING, SWINGING, SUPPORTING, LANDING

Horizontal bars of varying distances from the ground are necessary to accommodate the differences in children's heights. The lowest bar should be about 2 feet high, or about chest high for the small child. The surface under the bars should be free of protruding and unsafe objects such as concrete and stones. Sand, sawdust, padded mats,

or synthetic safety surfaces are highly desirable under the equipment. It is essential that children not work in crowded conditions.

WARNING. Work in which the body weight is borne by the hands requires a gradual increasing of arm and shoulder strength and increasing the toughness of the palms. Big, painful blisters on the palms can develop quickly unless the amount of work at one time is limited according to the condition of the hands.

- pl,4 1. (Low bar, chest high) Can you hold on to the bar with your hands? Let me see how you have your hands. Some people have their palms facing them and some people have their palms facing out. Let's try holding onto the bar with palms facing in--that is the underhand grip. Now let's try holding with the palms facing out--that is the overhand grip. Who can think of another way to place his hands on the bars? (one palm facing in and the other facing out) (Note: Check that the thumbs are around the bar, on the opposite side from the fingers, for additional strength and control of the grip.)
- b1 2. (Low bar, chest high) Can you hold onto the bar with an  
pl,4 overhand grip and swing under? Do you need to lift your feet so you can swing under?
- b3 3. (Low bar, chest high) Can you keep holding the bar, duck  
pl,2 your head, and run back and forth under the bar?
- b1 4. (Low bar, chest high) Can you hold onto the bar and bring  
s1 your knees up to your chest? Can anyone do a trick from  
pl,2,4 that position? (For example, the child may hook one or both knees over the bar, or "skin the cat.")
- b1 5. (Low bar, chest high) As children become stronger and  
s1,2 more confident, they may try activities demonstrated by  
pl,2,4 older children. Beware of instilling unnecessary fear in the child by being over-cautious and over-protective. It is more important that the surface under the equipment be checked to be as safe as possible. Review with children the skills of landing when jumping from a height and rolling in a curled shape. The important learning is to relax, tuck the head to the chest, and roll with the fall.

\* \* \* \* \*

- b1 6. (Horizontal bar over child's reaching height; the fearful  
pl,4 child should be able to reach his bar stretched from his  
s1 tiptoes while the more daring may want to be 2 or 3 feet off the ground.) How can you get up and hang from this bar? (Note: For the fearful child, lift him up to provide the assurance he can get up there but encourage him to bear

most of his weight. His confidence will build gradually with adult assistance, verbally and manually.)

b1 7. Can you hang from this bar using the three different kinds  
p1,4 of grip?

b1 8. Can you hang and swing your body back and forth? (Note:  
p1,4,5 Child should use overhand grip.)

b1 9. Can you hang and swing your body from side to side?  
p1,4,5

b1 10. Can you hang and kick your legs back and forth (alternate-  
p4,5 ly)?

b1 11. Can you hang and lift your knees up high? Can you lift  
p4 just one knee at a time?

b1 12. As the child's strength and confidence grow, he may try  
s1,2 other stunts on the high bar.

\* \* \* \* \*

b1 13. (Horizontal ladder, higher than child's reach with rungs  
p4 close enough for him to reach out and grasp comfortably.)  
Can you do the same tricks you did on the bar--swing back  
and forth, swing from side to side, kick your legs back  
and forth?

c3 14. Do you remember how to land when you jump from something  
p4 high? That's right--relax and bend your legs when you  
s1 land. Can you drop from the ladder and land softly?  
(Practice several times)

b1 15. Can you cross the ladder going from hand to hand? (Note:  
s1,2 As in stair climbing, the early stage of crossing the hori-  
zontal ladder consists of advancing one hand and then the  
other hand is brought up to the same rung rather than alter-  
nating the reaching hand. This pattern will persist longer  
than necessary if the distance between rungs is too great  
for the child to reach with alternate hands. The alter-  
nating of hands is assisted by the sideward/diagonal swing-  
ing of the body.)  
(Note: The wording of this task, "Can you cross the ladder?"  
would permit crossing the TOP of the ladder. Although that  
is not the intent at this particular time, it would be worth  
incorporating at another time. Some adults deny this activ-  
ity to children because of the possible danger of falling.  
It is important that children gain security in high places,  
whether stationary or moving. Rarely will a child attempt  
this feat unless he is reasonably sure he can do it. How-  
ever, it is also important that children who want to cross



the ladder in the usual suspended manner not be bothered or interfered with by children on top of the ladder. It will be necessary to stress mutual consideration for other people's choice of activities on the equipment.)

\* \* \* \* \*

b1 16. (Hanging rope, sturdy enough to support children--perhaps  
p4 one inch in diameter.) Can you reach up high and take hold of the rope? Can you lift your feet off the ground?

b1 17. Can you swing on the rope? Bring the rope back here (a  
p4,5 few steps away from where the rope naturally falls). Take hold up high, and there you go! (Note: Some children may take some running steps to build up momentum for swinging.)

b1 18. Some children may try climbing the rope.  
s1,2

\* \* \* \* \*

s1 19. (Have child lie on a box, bench, or similar low platform  
p1,4 about 12 inches high.) Can you put your hands on the floor, bend your head and roll forward? Let's try it again. First, put your hands down. Are your arms straight? (yes) What is your body resting on? (hands and box) Tuck your head and roll forward. Keep curled and land softly.

s1 20. (Draw two hands a child's shoulder width apart.)  
p1,4,5 Can you put your hands on the pictures and kick your feet up high? Can you kick both feet at the same time? Be careful of your neighbors.

s1 21. Can anyone balance on his hands for a second? If you lose  
p1,4,5 your balance, just bend your head to your chest and curl up into a roll.

s1 22. (Add a circle above the two hands.) Can you put your hands  
p1,4,5 on the picture and your head in the circle? Can you balance on your head and hands? If you start to fall, just curl up and roll.

\* \* \* \* \*

### C. PUSHING, PULLING, LIFTING

b1 1. Can you push against this wall? Are you pushing with all  
p1,5 your strength? What are you using to push against the wall?  
c3 (hands) Can you push against the wall with another part



of your body? (back, feet) Could you move the wall when you pushed against it? If we all pushed together could we move the wall? Why can't we move the wall? (too big, not enough force or strength)

- b1  
p1,4      2. Can you find different ways to push against the floor? (different positions can be taken--standing, lying, kneeling; different body parts can be in contact with the floor) What part of you was pushing against the floor? What position were you in when you were pushing? What happens if you lie face down on the floor, bend your arms, and push against the floor with your hands? What is that called when you do that? (push-up) Can you stand and push with just your toes? Can you do tiptoe push-ups? (rising and lowering on tiptoes)

\* \* \* \* \*

- c3  
p1,4      3. What happens if you squat down or crouch with bent legs and--oops! don't sit down!---and PUSH off with your feet? (jump) Can you find some other ways to use your feet in pushing? (hands and feet on floor; pushing with feet, lying on back and sliding on floor)

- p1  
c3      4. The first time we tried to move the wall by pushing and it did not move. Then we tried moving ourselves by pushing. Can we find something else in the room to push? (chair, cage ball, table, big block, cardboard or wooden box, wagon) What makes it hard to push? (any surface causing friction will increase difficulty) What makes pushing easy? (wheels, light weight) What happens if you push a tall box or block or chair at the top? (it falls over) What happens if you push just below the middle? (more effective to push through center of gravity)

- s3  
p5      5. Was there anything you found too big to push by yourself? Would it help if two people pushed together? How are you going to work together? Which direction do you want to go? So where will you have to stand? (together on the side opposite to the direction in which they wish to move an object) Are you pushing through the middle?

\* \* \* \* \*

- s3  
b1  
p1  
c3      6. Who is ready to have some fun with a partner? Can you find a partner who is about your size? When you were pushing against the wall and the other things, you kept your hands against the object you were pushing. Don't forget that is how to push. (Note: Do not allow bumping or ramming)

Can one partner be a "rock" or a "mountain" and the other partner try to move the "rock" by pushing against his back? What is the "rock" doing? (pushing against pusher or resisting) It is time to trade jobs.

- s3  
p1  
b1
7. Can both partners push against each other's backs? Before you start, be sure your backs are against each other. Perhaps if we hook our elbows together it will work better. What else is doing the pushing in addition to our backs? (legs and feet are pushing against the floor)

\* \* \* \* \*

- s3  
b1  
p4  
a3
8. (cage ball 24 to 36 inches in diameter--a large inflated ball covered with canvas--or similar sturdy but resilient object) Divide children in two teams of 2-3 players. Try to push the ball to opposite ends of the room or specified space. Any part of the body may be used to push. (A heavy-duty large denim bag stuffed with rags or pillows may be substituted.)

- c2
9. I wonder if anyone will be able to identify pushing when we use it in other ways this week. Perhaps we can start a list of work we do by pushing or a list of other kinds of pushing.

\* \* \* \* \*

- b1  
c3  
p1
10. (Note: Tie strong rope firmly to an immovable object such as a swing frame or fence support) Can you pull on the rope? What happens to the rope when you pull? (it becomes taut or a straight line) Can you use the rope to pull yourself closer to the swing frame? Keep the rope straight as you move closer, hand over hand.

\* \* \* \* \*

- b1  
p1
11. (Note: Suspend strong rope by tying it so it hangs about 6 inches from the ground. Child lies on his back holding the rope with his hands.) Can you pull your body off the ground? Reach high and pull hard with your arms. Can you pull yourself right up until standing? No fair using your feet to push!!

\* \* \* \* \*

b1 12. (Horizontal bar higher than child's head) Can you pull  
 c3 yourself up?--and then let yourself down slowly? (Note:  
 p1 The underhand grip or palms facing the child is easier than  
 the overhand grip or palms facing outward, but encourage  
 them to try both grips. The child will have to be reminded  
 to keep his thumb in opposition to the fingers in grasping  
 the bar.)

\* \* \* \* \*

b1 13. (Jungle gym or monkey bars). Can you hang from the bars  
 p1 and do pull-ups on the jungle gym? Make your arms do the  
 work.

b1 14. (Climbing rope or climbing pole) Can you pull with your  
 p1 arms to climb the pole? Maybe your feet and legs can help  
 you climb.

\* \* \* \* \*

b1 15. Can you find a partner who is about your size? Can you  
 s3 take hold of hands as if you were going to shake hands  
 p1 with your partner? That's it. Can you pull against each  
other? Careful, pulling is not jerking. Let's have a lit-  
 tle contest. If I draw a line between you, who can pull  
 his partner across the line?

s3 16. Can you take your partner's hands--both hands? Wait until  
 b1 I put this ball (or plastic bottle, or bean bag) between  
 c3 you. Can you pull your partner across the ball? Are you  
 ready? Get set--go! What are you learning to do to get  
 ready to pull? (legs apart, in direction of pull; body  
 crouched; firm grip. Some discussion and experimentation  
 may follow to develop better understanding of preparation  
 for pulling.)

s3 17. (Rubber ball about 8 inches in diameter) Can you find a  
 b1 partner about your size? Both of you put your arms around  
 the ball. Who can pull the ball away when I give the sig-  
 nal? Ready? Set--go!

\* \* \* \* \*

s3 18. Today let's have a pulling game with three people about  
 b1 the same size. Join hands in a little circle around this  
 p1 hoop (or small circle chalked on the floor). Who can keep  
from being pulled into the hoop when I say go? Ready? Set--  
 go!

\* \* \* \* \*

s3 19. (A jump rope, 8 to 12 feet long, about as thick as an adult's  
b1 thumb) Can you find a partner who is about your size for  
a tug of war contest? I am putting a line halfway between  
you two (draw a line or lay a string about 3 feet long be-  
tween them). Who can pull his partner across the line--  
WITHOUT JERKING? Ready? Set--go!

s3 20. This time let's have a tug of war with two pullers on each  
b1 side. Ready? Set--go!

\* \* \* \* \*

s3 21. Note: There are many opportunities for small children to  
c3 assist the teacher in lifting equipment or to join each  
p1 other in lifting equipment. It is good to point out how  
cooperation allows them to do work they could not do alone.  
Take the opportunity to discuss the need to have enough  
people helping to do the work without strain or danger;  
the procedure of standing close to the object to be lifted,  
to bend the legs and let the straightening of the legs do  
the work rather than the back muscles; and the need for all  
lifters to begin at the same time--perhaps with a signal.

\* \* \* \* \*

#### D. CLIMBING

p1 1. (Jungle gym or monkey bars) Can you climb around the sides  
b1 of the jungle gym? (moving sideward)? Can you climb higher  
s1 on the jungle gym? Can you climb in and out of the bars?  
(Note: Hard-soled shoes are dangerous for climbing on the  
pipes of a jungle-gym. Sneakers or tennis shoes or bare  
feet are better.)

\* \* \* \* \*

p4 2. Can you climb the stairs? (Use normal stairs in a build-  
ing if possible. Look for the child's ability to alter-  
nate the leading foot.) Can you climb down the stairs?  
(Note his need to hold onto railing or similar assistance.  
Very likely the adult-size stairs are not a true test of  
the child's ability to alternate his leading foot because  
his stride is still too short.)

s1 3. If movable stairs--3-4 steps high--are available, ask the  
c3 child to climb up and jump down toward the side. Some play-  
p4 ground equipment has a climbing platform with a fireman's  
pole for the child to descend.

\* \* \* \* \*

s1 4. The distance between steps of an adult-size stepladder  
p4 is usually too great for a child to climb; however, short  
step ladders could be tried.

\* \* \* \* \*

p4 5. (A plank at a slight slope--perhaps 10-15 degrees) Can  
s1 you climb the hill made by this plank? (Note: Increase  
steepness of the slope to make this more challenging.  
Additional ways to increase difficulty are to use a nar-  
rower plank or to use a thick, rounded pole.)

\* \* \* \* \*

s1 6. If large wooden blocks are available, encourage children  
p4 to pile them in varying heights and to climb over and on  
the pile of blocks. Check the natural environment for  
piles of stone or rock as possible climbing sites. Some  
playgrounds include old telephone poles of various heights  
set into the ground for children to climb.

\* \* \* \* \*

b1 7. Perpendicular and slanted pipes firmly imbedded in the  
s1 ground are challenging to climb. Children wrap their legs  
p1,4 around the pole and they grasp the pole between crossed  
ankles in order to combine the pull of the arms with the  
push of the legs. Some bare-foot children may "walk" up  
the pole in a monkey-like climb. Note that some climbing  
activities using a climbing rope or pole were presented  
in the previous section.

\* \* \* \* \*

s3 8. Take the children on an outdoor hike up a hill--the more  
b1 natural the setting, the better.

\* \* \* \* \*



## MANIPULATORY CONTROL ACTIVITIES

### A. PROJECTION

#### 1. ROLLING

p2,4 1. (PG-6 rubber ball, child sitting on the floor) Can you roll the ball around yourself? (Note: This requires the ability to change hands manipulating the ball.) Can you stand up and roll the ball around yourself?

c4  
p1,4 2. (Child sitting with legs extended) Can you roll the ball down your legs? Can you lift your legs together so the ball rolls back to your hands? Can you roll the ball down and back without stopping?

p2,3 3. (Partners sitting fairly close, facing each other, legs spread) Can you roll the ball to your partner? Let's make it harder by having you move farther apart. Can you still roll the ball to your partner? If that is still easy, move farther apart again.

p2,3 4. Did you notice that when you get so far apart it is difficult to roll the ball sitting down? Try standing up and see if you can roll the ball to your partner?

\* \* \* \* \*

c3  
p1,2,3,4 5. Can you roll the ball to your partner with one hand? (Note: Check their feet for opposition. The foot on the side opposite the rolling hand should step forward. If not, ask them to try rolling with the opposite foot stepping forward.)

p3  
s3  
c3 6. (One partner stands in front of a wall, fence or similar kind of obstacle, feet spread apart.) Can you roll the ball between your partner's legs? Take three turns and let your partner have his turns. Are you getting the ball to roll smoothly? Do you know why the ball goes bumpy? (ball is dropped instead of released on the surface)

a3  
p2,3 7. (PG-6 rubber ball) Can you roll the ball along the line on the floor (or other smooth surface)? Can you roll the ball straight and fast? Be careful your ball doesn't get bumpy because you hurry too much. Let's have a race among all the balls. Ready? Set--go! OH! You can't win the race if your ball goes crooked.

c4  
p2,3 8. Can you roll the ball in a straight path and race with it yourself? Let's all roll our balls straight ahead so we don't have any collisions.

\* \* \* \* \*

- a3 9. Let's see who are faster--the runners or the rolling balls?  
s2,3 One partner get ready to roll the ball, the other partner  
c4 stand beside him ready to run. Are you all on the starting  
line? Ready? Set--go! Change jobs and we'll race again.

\* \* \* \* \*

(Note: For the following tasks use a 6-inch diameter rubber ball.)

- s3 10. (Place two markers, e.g., plastic bottles or milk cartons  
p2,3 about 3 feet apart and about 5 feet from a rolling line.)  
Can you roll the ball between these 2 markers 3 times?  
Then let your partner have his turn. Let me know when you  
can roll the ball through the target 3 times. I have  
a harder job for you to do: rolling the ball from 10 feet  
away can you get through 3 times? Then from 15 feet away  
can you get through 3 times? (Note: For the more skillful,  
make the challenge to roll through the target 3 times  
in a row without missing. Be alert if this is too frustrat-  
ing and, if so, ease the challenge.)
- p2,3 11. It looks as if I will have to make the challenge more diffi-  
s2,3 cult! Let's make the target smaller (about 30 inches apart).  
Who can roll the ball between the markers 3 times? (Note:  
For those who are not too successful, continue to let them  
try from 5 and 10 feet away to insure their success; for  
the more skillful, use distances of 10 and 15 feet.) Let  
your partner have his turn before you move back to the far-  
ther distance.
- p2,3 12. If you passed that challenge, then it is time to make it  
s2,3 even more difficult; let's make the target smaller. (Reduce  
width to 24 inches, rolling from 5, 10, 15 feet away.)
- p2,3 13. I think this is just about as hard as I can make this! Who  
s2,3 can roll the ball between the markers 3 times when they are  
only this far apart? (width reduced to 18 inches) Can you  
roll the ball through 5 times?

\* \* \* \* \*

- p2,3 14. At a later date have the child stand 10 feet away and roll  
s2,3 at targets of progressively smaller widths, rolling through  
each target 3 times before moving to the next smaller width.
- p2,3 15. For children who can accomplish the previous task, have them  
s2,3 roll from 15 feet away at progressively smaller targets.

\* \* \* \* \*

- p2,3 16. At another time, have the children roll the ball through  
s2,3 the target 5 times before they move to the next smaller target.

\* \* \* \* \*

- s3 17. (Place a large wooden construction block 18-24 inches long  
p2,3 on its side, about 10 feet away from child who is rolling.  
His partner will stand behind the block to return the ball.)  
Can you roll the ball and hit the block? Can you hit the  
block 3 times? Let your partner have a turn.

- c3 18. If you can hit the big block, can you hit the smaller (12  
p2,3 inches long) 3 times? What are you doing that helps you  
s3 hit the target? (rolling the ball straight and smooth, :  
keeping eyes on target) Change jobs with your partner.  
(Note: To stimulate their efforts further, place a bell  
or some other noise-maker on the block so that when the  
block is hit a special sound is heard.)

- p2,3 19. Can you roll the ball from farther away (15 feet) and hit  
the small block 3 times? Think hard about aiming and roll-  
ing the ball smoothly. (Note: Perhaps there will be an  
appropriate time to remind the child about rolling with  
the opposite foot stepping forward, or he may be swinging  
his arm across his body rather than toward the target.  
Give hints as they are needed.)

\* \* \* \* \*

- p2,3 20. (Set up 10 "bowling pins"--plastic bottles or milk cartons--  
s3 in a triangular pattern, 10 feet from a rolling line) Can  
a3 you roll the ball at the bowling pins? How many can you  
knock down? Set them up again and give your partner a turn.  
(Note: To increase the challenge change the distance to  
15 feet.)

\* \* \* \* \*

- p2,3 21. When you go bowling with the big folks, you get 2 tries  
s3 to knock all the pins down. How many can you knock down  
a3 in 2 tries? (Note: Remove the toppled pins before the  
c4 second ball is rolled.) After you roll the ball 2 times,  
set all the pins up and give your partner his turn to roll  
the ball twice. Do you know what it is called if you knock  
all the bowling pins down with the first ball? (strike)  
What is it called if you knock all the pins down with 2  
tries? (spare)

\* \* \* \* \*

- s3 22. (Set up 2 markers to make a goal 5 feet wide. One partner  
p2,3 stands in front of the goal and tries to keep the ball from  
c3 going between markers.) Can you roll the ball through the  
a3 goal if your partner is trying to block the ball? How are  
you going to fool him? (pretend to roll to one side but  
actually roll to the other; roll quickly before the partner  
is ready) Trade jobs with your partner.

\* \* \* \* \*

- p2,3 23. (Group of 3-5 children standing with their backs to a wall  
s3 or fence about 10-15 feet wide; child with a ball about  
a3 10-12 feet away.) Benny, can you roll the ball and hit  
c3 one of the children on the legs? That would be easy if they  
stood still, but they can move around to dodge the ball.  
Benny, if you hit one of the children on the legs, he has  
to take your place. (Note: After the children play the  
game, begin to ask questions about strategy: where should  
the roller aim? how can the dodgers fool the roller?)

\* \* \* \* \*

#### A. PROJECTION

##### 2. THROWING FOR DISTANCE

- p4 1. (Beanbags, or, if necessary, a small sponge ball or tennis  
c2 ball) How far can you throw? Good, go get your own bean-  
b1 bag and come back to the line. (Note: Observe what throw-  
ing pattern the child uses--overhand, underhand, or side-  
arm.) Wait until all the children are back at the line  
before you throw again.
- p2,4 2. (While the children were throwing, determine an approximate  
distance that all children could throw "on the fly" (before  
the ball touches the ground.) Then set up a marker this  
distance from the throwing line--perhaps 10-15 feet.) Can  
you throw your beanbag beyond this line? (Note: Do not  
emphasize that the ball has to be "on the fly" when it  
crosses the line. Assuming that all children are able to  
pass the first distance, move the marker 5 feet further  
away.) Can you throw this far? (Continue to move the  
marker as long as the children are successful. Observe  
approximate abilities for future setting of goals.)

\* \* \* \* \*

- p2,4  
c3 3. (Blank wall or similar large target area, beanbags. Children stand 12-15 feet away.) How hard can you throw the beanbag at the wall? Can you 'smash' the beanbag against the wall? (Repeat several times, emphasizing throwing hard. Very likely an overhand pattern will be used. Have children observe a child who shows a strong overhand throw.) Can you throw like Tony?
- c3  
p2,3 4. (Draw or tack a target--e.g., a star--on the wall about 5 feet from the ground. Have children stand astride a line with non-throwing side toward the target 12-15 feet away.) Can you throw hard and hit the star? Watch where your beanbag hits. If it hits below the target, where should you aim? (higher) (Continue throwing with emphasis on throwing hard.)
- \* \* \* \* \*
- c3  
p2,4 5. (Set up numbered markers--1-10 feet from throwing line, 2-15 feet away, 3-20 feet away, 4-25 feet away, 5-30 feet, 6-40 feet, 7-50 feet, 8-60 feet, 9-70 feet, 10-80 feet--depending upon your observations of the children's throwing ability.) We've been practicing throwing hard. Let's see if it helps us throw farther. How far can you throw your beanbag today? (Repeat several times.) Can you take a big windup?
- s1  
p4  
c2 6. (Provide each child with 3 beanbags. Using the markers : above as a guide, estimate how far he can throw according to where the farthest beanbag lands.) What is your best throw today?
- \* \* \* \* \*
- s1  
p4,6 7. (Sponge ball or tennis ball) I think I know something that can go farther than a beanbag. Try throwing this ball as far as you can. Doesn't it go farther if you throw hard? (Note: Remind children to stand in stride position on the line.)
- c4  
p2  
b1 8. Who can throw his ball faster than he can run? When I say go, throw the ball as far as you can and run after it. Does it land before you get there? I wonder why?
- p2,4 9. Can you throw the ball at the clouds in the sky (or the top of a distant tree--any target that requires throwing at about a 45° angle)? Point your other arm at your target when you get ready to throw. Can you throw the ball over my head (stand 25 feet away)?



- s1,2 10. (Set up numbered markers again and this time have children throw sponge ball or tennis ball) Let's measure how far you can throw the ball. Can you throw farther than you did with the beanbag? (If you have information about how far each child threw with a beanbag, put a marker of some sort to indicate his old record and a goal to beat today.)

\* \* \* \* \*

- p1,4, 11. (Midget or toy football with outline of proper grip drawn on  
6 the ball) Can you put your fingers inside these lines? Let me check--good. Let's see how hard you can throw the football. Keep the pointed end straight ahead. Snap it hard as you let go.

\* \* \* \* \*

- p4,6 12. (Make paper airplanes by folding paper lengthwise, folding  
p5 both corners at one end to 45°, then folding the two sides in half lengthwise again. Show children what you are making, then give them directions and assistance in making their own.) Can you fly your airplane? It is really more like a glider. You don't have to throw so hard.

\* \* \* \* \*

- c3 13. (Playground or utility ball, rubber or vinyl, 8 inches in  
p4,5 diameter) How high can you throw your ball? Oops! Don't throw it backwards! Try again with your hands letting go straight up in the sky. Who can come closest to the clouds? (Note: For a ball of this size, two hands are needed to throw the ball in a scooping upward motion.)

- c3 14. (Beanbags) Who can throw a beanbag upward with only one  
p4 hand? Remember to let your hand point straight up when you let go of the ball.

\* \* \* \* \*

- p4,5, 15. (Plastic frisbee or flying saucer) Can you throw your fris-  
6 bee? How is it different from your ball or your beanbag? (flat, thin, light) What do you think it will do because it has a different shape? (float, sail) You have to throw it in a different way if you want it to sail. Can you see how I fling my arm away? (Note: Throwing arm is started

on the opposite side of the body and quickly extended out to the throwing side in a side-arm backhand motion.) Now you try it.

\* \* \* \* \*

#### A. PROJECTION

##### 3. THROWING FOR ACCURACY

- p3 1. (Beanbags, hula hoop, or similar large circle cut from card-board) Can you toss the beanbag into the hoop? Let's see if you can do it from here (draw a line 5 feet from target). Who can toss 3 beanbags into the hoop? (Note: The implication of "toss" is that the child throws with one hand in an underhand motion.)
- p3 2. That must have been easy. Let's move back to this line (10 feet from target). Who can toss 3 beanbags into the hoop? (Note: Any number of throws is permitted until the child gets 3 in the target.)
- p3 s1 3. I think we can make it even more difficult. This time you only get 5 beanbags to throw. How many can you toss into the hoop?

\* \* \* \* \*

- p3 s1 4. (Beanbags, wastebasket, or corrugated box. It is easier if the target is tilted toward the child. At first place the target at a distance that assures success.) Can you toss the beanbag into the basket? This is going to take some practice. Can everyone do it now? Then it is time to make it more difficult. Move back to this line and see if you can toss the beanbag into the target. Let me know when you have 3 beanbags in the basket.
- s3 5. Let's have 2 teams with a basket for each team. Which team can be the first to toss 3 beanbags into the basket? Remember, you have to stand behind this line when you toss. Ready? Set--go!

\* \* \* \* \*

- p3 c3 6. (Beanbags, target with holes of 3 different diameters--12, 9, and 6 inches, each hole numbered with "I" for the largest, "II" for the middle size, and "III" for the smallest ) Are you ready to see how many points you can make? Which holes

will be the hardest to hit? (small) Which holes will be the easiest? (large) Which holes do you think will be worth more points? (small) Let's practice a little while.

- p3  
a3 7. This game isn't going to be easy! I want you to keep score, too. When you toss the beanbag through the hole, write the number of points on the paper. When we get done, we will count how many points each player made.

\* \* \* \* \*

- p3,5 8. A tennis ball, plastic whiffle ball, or similar small ball that can be held in one hand may be used in target tossing. It is more time-consuming than the beanbag because of the rebound qualities of a ball.

\* \* \* \* \*

- p3 9. (Vinyl or rubber playground ball about 8 inches in diameter, basketball hoop 5-6 feet from the ground on a backboard 4 ft. x 4 ft.) Can you make a basket? (Note: Any style of throwing is acceptable. If the ball is too heavy, a two-hand underhand pattern probably will be necessary. The lighter vinyl ball should permit the child to imitate the pushing, one-hand shots the older children use.)

\* \* \* \* \*

- p3,4 10. (Beanbags or small hand balls, large brightly colored target about 3 ft. x 3 ft. mounted in upright position against wall or similar surface that will serve to stop the ball from going far. Children stand 12-15 feet away at first, then farther as they successfully hit the target.) Can you throw hard enough to hit this big target? (Note: An over-hand motion should be expected as the challenge demands more force to cover the greater distance. A balloon attached to the center of the target makes a greater challenge.)

\* \* \* \* \*

- p2,3  
c3 11. (Large ball or hula hoop; children stand in a line holding a beanbag; the teacher rolls the large ball or hoop 10 feet in front of and parallel to the children.) Who can hit this moving target? Oh! This isn't so easy! Why is it more difficult to hit a moving target? (it is not in the same place) Where do you aim--at the target or ahead of the target? Let's try aiming ahead of the target.

\* \* \* \* \*

p2,3 12. The game of dodgeball described under Rolling Activities  
s3 may be tried with a light-weight plastic ball or yarn ball  
a3 being thrown at the children.

\* \* \* \* \*

p2,3 13. (Hoop or bicycle tire suspended from rope so it may be set  
in motion swinging back and forth; beanbags or small hand-  
balls) Can you throw the ball through the target?

\* \* \* \* \*

## References

- Barsch, R.H. Achieving perceptual motor efficiency. Vol. I., Seattle, Washington, Special Child Publications, 1967.
- Braley, W., Konicki, G., & Leedy, D. Daily sensorimotor training activities (A handbook for teachers and parents of preschool children). Kimbo Educational Records, Box 55, Deal, N.J., 1968.
- Cohen, L.A. Perceptual-motor foundations: A multidisciplinary concern, Washington, D.C., AAPHER, 1969.
- Espenshade, A.S., and Eckert, H.M. Motor development. Columbus, Ohio, Charles E. Merrill Books, Inc., 1967.
- Godfrey, B. & Kephart, C. Movement patterns and motor education. New York: Appleton-Century-Crofts, 1969.
- Gutteridge, Mary C. A study of motor achievements of young children. Arch. Psychology, 1939, 34, No. 244.
- Prekindergarten-Kindergarten Research Center, Motor activities. (Booklet I, developmental skills series), School District of University City, University City, Missouri, 1967.
- Rowan, B. Learning through movement. New York: Teachers College, Columbia University, Bureau of Publications, 1963.
- Singer, R.N. Motor learning and human performance. New York: Macmillan Company, 1968.